

Cookbook of Activities for Driver Education

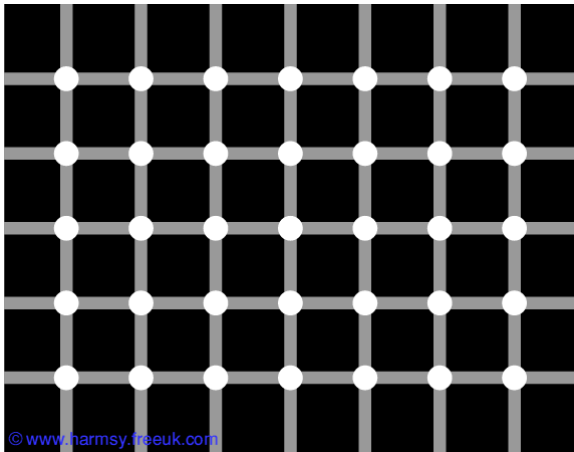
MT CURRICULUM GUIDE

M5

Objective: Discover optical illusions

INGREDIENTS

Put this diagram on an overhead transparency – web site:
<http://www.harmsy.freeuk.com/GDexp.html>



MT CURRICULUM GUIDE

M 5

Objective: Demonstrate the power vision has on hand control

INGREDIENTS

12-16 inches of string for each student or group

1 Large washer for each string

INSTRUCTIONS

Look carefully at any of the white dots in the grid below. How many black or gray dots can you see elsewhere in the grid? Look again!

Explanation:

A simple grid of thick grey lines on a black background, punctuated with white dots at the intersections, leads to an intriguing result.

The white spots elsewhere in the grid become discolored by your brain! Much of what we see in our peripheral vision is *interpolated* by our brain, rather than being 100% pure information from the eyes. This is particularly true with large areas of constant colour - and this grid is essentially all black.

As a result, your brain tries to fill in the white circles with the predominant shade of black. In other words, there appears to be slightly smaller black or grey circles dancing around inside the ones you're not looking directly at.

INSTRUCTIONS

Making the tool: tie the washer to the end of the piece of string.

Part 1

Demonstrate to the class:

Dangle the washer at eye level. Hold it until it is still.

Focus on the washer and move your eyes from side to side. The washer should start to move side to side as your eyes move back and forth.

STOP moving your eyes back and forth.

Move your eyes in a circular motion, still focusing on the washer.

STOP

Continue moving the washer from side to side then in circles without stopping.

Part 2

Divide students into groups and have them practice the demonstration.